

## CLAIMS

WE CLAIM:

1. A process for the decompression of animated images compressed by a method incorporating block treatment of images and containing
  - 5 (a) a digital data recombination phase defining predefined forms;
  - (b) a movement modeling stage of these forms using a process of prediction, interpolation and temporal compensation;
  - (c) an image composition phase from reconstructed elements of JPEG or MPEG type motion, wherein the form recombination stage includes a process for separating fixed forms from mobile forms;
  - 10 (d) a process for recording digital data corresponding to fixed forms treated with a filter which is not separable from the processes implemented in the recombination phase in a first specific memory unit; and
  - (e) digital data corresponding to mobile forms in a second specific memory unit.
2. The process of claim 1, wherein the recombination includes an irreducible digital filter.
- 20 3. The process of claim 1, wherein the filter regularizes the background image.
4. The process of claim 1,
  - 25 (a) wherein the quantification interval used during background image compression is stored; and
  - (b) wherein the quantification interval is projected on the quantification interval.

5. The process of claim 1, wherein the reconstruction of elements uses previously defined quantification parameters for the compression of images by the coder.
- 5      6. The process of claim 5, wherein the quantification parameters are defined by the transfer function of methods for acquisition and memory storage of animated images.
- 10     7. The process of claim 1, wherein a second digital filter separates and identifies the mobile elements in mobile objects moving in a sequence.
- 15     8. The process of claim 7, wherein the identification of mobile objects is performed in accordance with the evolution of predetermined digital criteria.
9. The process of claim 8, wherein the digital criteria define the geometry of mobile objects.
10. The process of claim 8, wherein the digital criteria define the movement of mobile objects.
- 20     11. The process of claim 8, wherein the digital criteria define the spatial segmentation of mobile objects.
12. The process of claim 7, wherein temporal averaging is performed with compensation for movement for each object identified.
- 25     13. The process of claim 7, wherein the identified objects are regularized.

14. The process of claim 7, wherein the quantification interval, having served to compress the animated sequence, is stored and by the fact that it is projected on the quantification interval.
- 5      15. The process of claim 7, wherein the specific parameters for each object identified are stored separately in order to treat each object differently.
16. The process of claim 1, wherein the mobile objects and the average representation are superimposed in fixed image time for display of the animated sequence.

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17. A device for decompression of animated images compressed by a method including
- (a) block treatment of images containing a digital data recomposition stage defining predefined forms;
  - (b) a phase modeling the movement of these forms using a process of prediction, interpolation and temporal compensation;
  - (c) an image composition phase from reconstructed elements of JPEG or MPEG type motion, wherein the phase includes a process for separating fixed forms from mobile forms;
  - (d) a process for recording digital data corresponding to the fixed forms treated by a filter not separable from the processes implemented in the recomposition phase in a first specific memory unit; and
  - (e) digital data corresponding to mobile forms in a second specific memory unit.

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- 25      18. The device of claim 16, wherein the recomposition includes methods for irreducible digital filtration.

19. The device of claim 16, wherein the device comprises methods for storage of the type of image compressed.

20. The device of claim 16, wherein the device comprises a detachable support.

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21. The device of claim 19, wherein the device comprises an independent chip.

22. The device of claim 19, wherein the device comprises a graphics memory card which can be inserted into a computer.

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23. The device of claim 16, wherein the device comprises a software module independent of the software present in a calculator memory.

24. A computer containing the device of claim 16.

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